

In view of the above-discussed exemplary aspects of the present invention~~Concerning to~~
that, the mounting section 14c is set at the position longitudinally overlapping with the second electric motor 23 in the casing member 14 as shown in FIG. 15. It is noted that the reference characters in FIG. 15 correspond to those in FIG. 3 in the present embodiment.

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A hybrid driving unit, comprising:
 - an input shaft for inputting motive power from an internal combustion engine;
 - an output shaft disposed on an axis in line with said input shaft and interlocking with driving wheels;
 - a first electric motor disposed on said axis and comprising~~having~~ a first stator and a first rotor;
 - a power splitting planetary gear disposed on said axis and comprising~~having~~ a first rotary element coupled with said input shaft, a second rotary element coupled with said rotor of said first electric motor and a third rotary element coupled with said output shaft;
 - a second electric motor disposed on said axis and comprising~~having~~ a second stator and a second rotor; and
 - a transmission disposed on said axis and shifting and transmitting revolution of said second rotor of said second electric motor to said output shaft~~, and~~

~~said hybrid driving unit being characterized in that~~wherein:

said first electric motor, said power splitting planetary gear, said second electric motor and said transmission are stored in a casing member while being disposed in line on said axis;

said first and second stators of said first and second electric motors, respectively, are fixed to said casing member;

said casing member is provided, at ~~the~~ front end thereof, with a coupling section which can be fixed to said internal combustion engine and at ~~the~~ rear end thereof, with a mounting section which can be supported by a body; and

one of said first electric motor and said second electric motors is disposed in the rearmost part with respect to ~~among said first electric motor~~, said power splitting planetary gear, ~~said second electric motor~~, the other of said first electric motor and said second electric motor, and said transmission disposed in said casing member along said axis.

2. (currently amended): The hybrid driving unit as set forth in Claim 1, wherein ~~characterized in that~~ supporting members extending from said casing member support ~~the both~~ sides of one of said first and second rotors ~~of said electric motor~~, ~~among said first and second electric motors~~, disposed in the rearmost end through an intermediary of bearing members; and

said mounting section is provided at the position axially overlapping with a ~~said~~ rear supporting member ~~among~~of said supporting members.

3. (currently amended): The hybrid driving unit as set forth in Claim 2, wherein ~~characterized in that~~ said output shaft is disposed through the inner peripheral side of said one of said first electric motor and said second electric motors and is supported by ~~said rotor of the said~~ one of said first and second ~~electric motors~~ rotors through an intermediary of bearing members.

4. (currently amended): The hybrid driving unit as set forth in Claim 1, wherein ~~characterized in that~~ the other one of said first electric motor and said second electric motors is disposed in ~~at the foremost part position with respect to among said first electric motor,~~ said power splitting planetary gear, ~~said second electric motor~~ and said transmission disposed on said axis in said casing member.

5. (currently amended): The hybrid driving unit as set forth in Claim 4, wherein ~~characterized in that~~ supporting members extending from said casing member support said rotor of the other one of said first electric motor and said second electric motors through an intermediary of bearing members, and said input shaft is coupled with said power splitting planetary gear through ~~the~~ an inner peripheral side of said rotor of the other one of said first electric motor and said second electric motor and is supported by the rotor of the other one of said first electric motor and said second electric motor through another intermediary of bearing members.

6. (currently amended): The hybrid driving unit as set forth in Claim 4, wherein ~~characterized in that~~ said first electric motor, said transmission, said power splitting planetary gear and said second electric motor are disposed in order from ~~the~~ a side closer to said internal combustion engine.

7. (currently amended): The hybrid driving unit as set forth in Claim 6, wherein ~~characterized in that~~ said input shaft passes through a first ~~the~~ inner peripheral side of said first electric motor and said transmission and is coupled with said first rotary element, and said output shaft passes through a second ~~the~~ inner peripheral side of said transmission and said second electric motor.

8. (currently amended): The hybrid driving unit as set forth in Claim 7, wherein
~~characterized in that~~ said power splitting planetary gear comprises a single pinion planetary gear
train;

said input shaft passes through a third ~~the~~ inner peripheral side of said power splitting
planetary gear and is coupled with ~~said~~ a transmission side of a carrier of said single pinion
planetary gear train;

said output shaft passes through between said power splitting planetary gear and said
transmission and is coupled with a ring gear of said single pinion planetary gear train; and

said first rotor of said first electric motor is coupled with a sun gear of said single pinion
planetary gear train.

9. (currently amended): The hybrid driving unit as set forth in Claim 7, wherein
~~characterized in that~~ said power splitting planetary gear comprises a single pinion planetary gear
train;

said input shaft passes through between said first electric motor and said power splitting
planetary gear and is coupled with ~~said~~ a carrier of said single pinion planetary gear train on ~~the~~ a
side of said first electric motor;

said output shaft is coupled with a ~~said~~ sun gear of said single pinion planetary gear; and

said first rotor of said first electric motor is coupled with a ~~said~~ ring gear of said single
pinion planetary gear.

10. (currently amended): The hybrid driving unit as set forth in Claim 7, wherein
~~characterized in that~~ said power splitting planetary gear comprises a double pinion planetary gear
train;

said input shaft passes through an ~~the~~ inner peripheral side of said power splitting planetary gear and is coupled with a ~~said~~ ring gear of said double pinion planetary gear train;

said output shaft passes through an ~~the~~ outer peripheral side of said power splitting planetary gear and between said first rotor of said first electric motor and said power splitting planetary gear and is coupled with a ~~the~~ carrier of said double pinion planetary gear train on the first electric motor side; and

said first rotor of said first electric motor is coupled with a ~~said~~ sun gear of said double pinion planetary gear train.

11. (currently amended): The hybrid driving unit as set forth in Claim 7, wherein ~~characterized in that~~ said power splitting planetary gear comprises a double pinion planetary gear train;

said input shaft passes ~~through between adjacent to~~ said first electric motor and said power splitting planetary gear and is coupled with a ~~the~~ ring gear of said double pinion planetary gear train;

said output shaft is coupled with a ~~the~~ sun gear of said double pinion planetary gear; and

said first rotor of said first electric motor is coupled with a ~~the~~ carrier of said double pinion planetary gear on a ~~the~~ transmission side through an ~~the~~ outer peripheral side of said power splitting planetary gear.

12. (currently amended): The hybrid driving unit as set forth in Claim 4, wherein said second electric motor, said transmission, said power splitting planetary gear and said first electric motor are disposed in order from a side closer to said internal combustion engine1, characterized in that said power splitting planetary gear, said first electric motor, said transmission and said

~~second electric motor are disposed in order from the side closer to said internal combustion engine.~~

13. (currently amended): The hybrid driving unit as set forth in Claim 12, wherein said input shaft is coupled with said first rotary element through a second inner peripheral side of said second electric motor and said transmission;

said output shaft passes through a first inner peripheral side of said first electric motor;
and

an output element of said transmission is coupled with said output shaft through an outer peripheral side of said power splitting planetary gear~~characterized in that said output shaft passes through the inner peripheral side of said power splitting planetary gear, said first electric motor, said transmission and said second electric motor.~~

14. (currently amended): The hybrid driving unit as set forth in Claim 13, wherein said power splitting planetary gear comprises a double pinion planetary gear train;

said input shaft passes by said transmission and said power splitting planetary gear and is coupled with a ring gear of said double pinion planetary gear train;

said output shaft is coupled with a carrier of said double pinion planetary gear on a side of the transmission through a third inner peripheral side of said power splitting planetary gear;

said first rotor of said first electric motor is coupled with the sun gear of said double pinion planetary gear; and

said output element of said transmission is coupled with a carrier of said double pinion planetary gear on the transmission side through the outer peripheral side of said power splitting

~~planetary gear characterized in that said power splitting planetary gear comprises a single pinion planetary gear train;~~

~~said input shaft is coupled with the front side of said carrier of said single pinion planetary gear train;~~

~~said output shaft is coupled with the sun gear of said single pinion planetary gear train;~~
and

~~said rotor of said first electric motor is coupled with the ring gear of said single pinion planetary gear train.~~

15. (currently amended): The hybrid driving unit as set forth in Claim 13, wherein said first electric motor, said transmission, said power splitting planetary gear and said first electric motor are disposed in order from a side closer to said internal combustion engine~~characterized in that said power splitting planetary gear comprises a single pinion planetary gear train;~~

~~said input shaft is coupled with the carrier of said single pinion planetary gear train on the side of the first electric motor;~~

~~said output shaft is coupled with the ring gear of said single pinion planetary gear through the part between said power splitting planetary gear and said first electric motor; and~~

~~said rotor of said first electric motor is coupled with the front side of said carrier of said single pinion planetary gear through the outer peripheral side of said power splitting planetary gear.~~

16. (currently amended): The hybrid driving unit as set forth in Claim 15, wherein said input shaft is coupled with said first rotary element through a first inner peripheral side of said

first electric motor, said transmission and said power splitting planetary gear; said output shaft passes through a second inner peripheral side of said second electric motor;

an output element of said transmission is coupled with said output shaft through an outer peripheral side of said power splitting planetary gear; and

said second rotor of said second electric motor is coupled with an input element of said transmission through the outer peripheral side of said power splitting planetary gear¹³,
~~characterized in that said power splitting planetary gear comprises a double pinion planetary gear train;~~

~~said input shaft is coupled with the ring gear of said double pinion planetary gear train;~~

~~said output shaft is coupled with said carrier of said single pinion planetary gear train through the part between said input shaft and said power splitting planetary gear; and~~

~~said rotor of said first electric motor is coupled with the sun gear of said single pinion planetary gear train.~~

17. (currently amended): The hybrid driving unit as set forth in Claim 16, wherein said power splitting planetary gear comprises a double pinion planetary gear train;

said input shaft passes through a part between said power splitting planetary gear and said second electric motor and is coupled with a ring gear of said double pinion planetary gear train;

said output shaft is coupled with a carrier of said double pinion planetary gear on a side of said transmission through the outer peripheral side of said power splitting planetary gear;

said first rotor of said first electric motor is coupled with a sun gear of said double pinion planetary gear through the inner peripheral side of said transmission; and

~~said output element of said transmission is coupled with said carrier of said double pinion planetary gear on a transmission side13, characterized in that said power splitting planetary gear comprises a double pinion planetary gear train;~~

~~said input shaft is coupled with said ring gear of said double pinion planetary gear train;
said output shaft is coupled with the sun gear of said double pinion planetary gear; and
said rotor of said first electric motor is coupled with the carrier of said double pinion planetary gear on the side of the rotor of said first electric motor.~~

18. (currently amended): The hybrid driving unit as set forth in Claim 1, wherein said power splitting planetary gear, said first electric motor, said transmission and said second electric motor are disposed in order from a side closer to said internal combustion engine4, characterized in that said second electric motor, said transmission, said power splitting planetary gear and said first electric motor are disposed in order from the side closer to said internal combustion engine.

19. (currently amended): The hybrid driving unit as set forth in Claim 18, wherein said output shaft passes through an inner peripheral side of said power splitting planetary gear, said first electric motor, said transmission and said second electric motore~~characterized in that said input shaft is coupled with said first rotary element through the inner peripheral side of said second electric motor and said transmission;~~

~~said output shaft passes through said inner peripheral side of said first electric motor; and
said output element of said transmission is coupled with said output shaft through the outer peripheral side of said power splitting planetary gear.~~

20. (currently amended): The hybrid driving unit as set forth in Claim 19, wherein said power splitting planetary gear comprises a single pinion planetary gear train;

said input shaft is coupled with a front side of a carrier of said single pinion planetary gear train;

said output shaft is coupled with a sun gear of said single pinion planetary gear train; and

said first rotor of said first electric motor is coupled with a ring gear of said single pinion planetary gear train~~characterized in that said power splitting planetary gear comprises a double pinion planetary gear train;~~

~~said input shaft passes through between said transmission and said power splitting planetary gear and is coupled with the ring gear of said double pinion planetary gear train;~~

~~said output shaft is coupled with the carrier of said double pinion planetary gear on the side of the transmission through the inner peripheral side of said power splitting planetary gear;~~

~~said rotor of said first electric motor is coupled with the sun gear of said double pinion planetary gear; and~~

~~said output element of said transmission is coupled with the carrier of said double pinion planetary gear on the transmission side through the outer peripheral side of said power splitting planetary gear.~~

21. (currently amended): The hybrid driving unit as set forth in Claim 19, wherein said power splitting planetary gear comprises a single pinion planetary gear train;

said input shaft is coupled with a carrier of said single pinion planetary gear train on a side of the first electric motor;

said output shaft is coupled with a ring gear of said single pinion planetary gear through a part between said power splitting planetary gear and said first electric motor; and

said first rotor of said first electric motor is coupled with a front side of said carrier of said single pinion planetary gear through an outer peripheral side of said power splitting planetary gear~~4, characterized in that said first electric motor, said transmission, said power splitting planetary gear and said first electric motor are disposed in order from the side closer to said internal combustion engine.~~

22. (currently amended): The hybrid driving unit as set forth in Claim 19, wherein said power splitting planetary gear comprises a double pinion planetary gear train;

said input shaft is coupled with a ring gear of said double pinion planetary gear train;

said output shaft is coupled with a carrier of said double pinion planetary gear train through a part between said input shaft and said power splitting planetary gear; and

said first rotor of said first electric motor is coupled with a sun gear of said double pinion planetary gear train~~21, characterized in that said input shaft is coupled with said first rotary element through the inner peripheral side of said first electric motor, said transmission and said power splitting planetary gear; said output shaft passes through the inner peripheral side of said second electric motor~~

~~said output element of said transmission is coupled with said output shaft through the outer peripheral side of said power splitting planetary gear; and~~

~~said rotor of said second electric motor is coupled with said input element of said transmission through the outer peripheral side of said power splitting planetary gear.~~

23. (currently amended): The hybrid driving unit as set forth in Claim 19, wherein said power splitting planetary gear comprises a double pinion planetary gear train;

said input shaft is coupled with a ring gear of said double pinion planetary gear train;

said output shaft is coupled with a sun gear of said double pinion planetary gear; and
said first rotor of said first electric motor is coupled with a carrier of said double pinion
planetary gear on a side of the first rotor of said first electric motor~~22, characterized in that said~~
~~power splitting planetary gear comprises a double pinion planetary gear train;~~

~~said input shaft passes through the part between said power splitting planetary gear and~~
~~said second electric motor and is coupled with said ring gear of said double pinion planetary gear~~
~~train;~~

~~said output shaft is coupled with said carrier of said double pinion planetary gear on the~~
~~side of said transmission through the outer peripheral side of said power splitting planetary gear;~~

~~said rotor of said first electric motor is coupled with the sun gear of said double pinion~~
~~planetary gear through the inner peripheral side of said transmission; and~~

~~said output element of said transmission is coupled with said carrier of said double pinion~~
~~planetary gear on the transmission side.~~

24. (currently amended): The hybrid driving unit as set forth in anyone of Claims 1
~~through 23, characterized in that~~ wherein said transmission ~~comprises~~has a planetary gear.

25. (currently amended): The hybrid driving unit as set forth in Claim 24, ~~characterized~~
~~in that~~ wherein said transmission ~~comprises~~has at least four shifting elements, ~~said a~~ a first shifting
element of said at least four shifting elements is coupled with said second rotor of said second
electric motor, said second shifting element of said at least four shifting elements is coupled with
said output shaft and said transmission ~~comprises~~has braking elements which are capable of
fixing ~~said~~ third and fourth shifting elements of said at least four shifting elements to said
easecasing member, respectively.

26. (currently amended): The hybrid driving unit as set forth in Claim 24, ~~characterized in that~~ wherein said planetary gear of said transmission comprises a Ravigneaux type planetary gear and ~~the a~~ carrier of said Ravigneaux type planetary gear is coupled with said output shaft.

27. (currently amended): The hybrid driving unit as set forth in anyone of Claims 1 ~~through 26, characterized in that~~ wherein one of said first and second electric motors is a device heavier than said power splitting planetary gear and said transmission.

28. (currently amended): The hybrid driving unit as set forth in Claim 1, ~~characterized in that~~ wherein supporting members extending from said casing member support ~~the~~ both sides of said rotor of said one of said first electric motor and said second electric motor disposed in the rearmost end ~~among said first and second electric motors~~ through an intermediary of bearing members; and

said mounting section is provided between ~~said a~~ front supporting member and ~~said a~~ rear supporting member.

29. (currently amended): The hybrid driving unit as set forth in Claim 1, ~~characterized in that~~ wherein supporting members extending from said casing member support ~~the~~ both sides of said rotor of said one of said first electric motor and said second electric motor disposed in the rearmost end ~~among said first and second electric motors~~ through an intermediary of bearing members; and

said mounting section is provided at ~~the a~~ position on ~~the a~~ rear side of ~~said a~~ rear supporting member among said supporting members.

USSN: Not yet assigned

30. (currently amended): A vehicle, comprising an internal combustion engine, hybrid driving means and rear wheels as driving wheels to which driving force is transmitted from said hybrid driving means,

~~said vehicle being characterized in that wherein~~ said hybrid driving means is said hybrid driving unit described in ~~any one of Claims 1 through 29~~; and

said hybrid driving unit is disposed such that the input and output shafts on the axis are longitudinally disposed ~~approximately substantially~~ on ~~one and a~~ same axial line with a propeller shaft as said internal combustion engine is disposed on ~~the a~~ front side of the body.

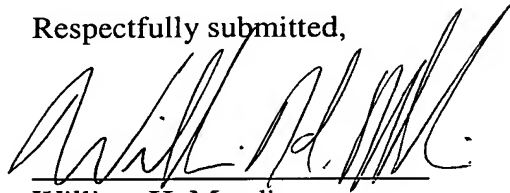
PRELIMINARY AMENDMENT
USSN: Not yet assigned

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REMARKS

Entry and consideration of this Amendment are respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'William H. Mandir', is written over a horizontal line.

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